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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,155	09/23/2003	Martin A. Cohen	884.0207USU	1663

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EXAMINER

RALIS, STEPHEN J

ART UNIT	PAPER NUMBER
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3742

MAIL DATE	DELIVERY MODE
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07/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/669,155

Applicant(s)

COHEN ET AL.

Examiner

Stephen J. Ralis

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007 and 25 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-20 and 82-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20 and 82-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 and 30 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 3742

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 April 2007 has been entered.

Response to Amendment/Arguments

3. Applicant's arguments, see pages 7-15, filed 30 April 2007, with respect to the rejection(s) of claim(s) 1-10, 12-20 and 82-84 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Nakao et al. (Japanese Publication No. JP 09164300A).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 8, 9 and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakao et al. (Japanese Publication No. JP 09164300A).

Nakao et al. disclose a controller (printed circuit board 28; and Drawing 1) for use with a fabric grooming device (cordless iron 2) comprising: an interactive user interface having one or more input selectors (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11), one or more output indicators (set temperature; temperature level; buzzer 14), and a digital display panel (liquid crystal display [LCD] 13) for displaying scrolled and segmented text; wherein said interface is operatively connected to a microprocessor (10), and wherein said interface is integrated onto the a handle of the fabric grooming device (see Drawing 2).

With respect to the limitation of a digital display panel for displaying scrolled and segmented text, Nakao et al. disclose the liquid crystal display (13) for displaying set temperature and the temperature level which would be inherently segmented text/numbers. In addition, it has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the claimed structural limitations and the ability to so perform as such. Nakao et al. clearly disclose a the liquid

Art Unit: 3742

crystal display (13) for displaying set temperature and the temperature level and would have the ability to display both scrolled and segmented text/numbers.

With respect to the limitations of claims 8 and 9 and at least one of said one or more output indicators being a display panel, specifically an LCD panel, Nakao et al. explicitly disclose the indicating means being a liquid crystal display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution) and a liquid crystal display for displaying set temperature and the temperature level inherently has a display panel for each output.

With respect to the limitations of claim 12 and one or more output indicators being a visual indicator, Nakao et al. explicitly disclose an indicating liquid crystal display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution).

With respect to the limitations of claims 13, 14 and 17 and one or more output indicators being an audible indicator, tactile indicator and the microprocessor being operatively connected to a vibrator, Nakao et al. explicitly disclose an output indicator (buzzer 14) being connected to the microprocessor (10). The buzzer clearly makes an audible indication of an event and the examiner notes that a buzzer would inherently create a vibration sensitive to touch or tactile indication of the buzzer when activated. Therefore, Nakao et al. fully meets "wherein said one or more output indicators are a tactile indicator" and "wherein said microprocessor is operatively connected to a vibrator" given its broadest reasonable interpretation.

Art Unit: 3742

With respect to the limitations of claim 15 and the microprocessor being operatively connected to a sound generator, one or more sensors, and/or a heater, Nakao et al. explicitly disclose a schematic circuit (see Drawing 1) comprising microprocessor (10) operatively connected to a temperature sensor/thermistor (15), buzzer (14) and heater (7).

With respect to the limitations of claims 16 and microprocessor is also operatively connected to a timer, Nakao et al. explicitly disclose the microprocessor (10) comprising detection means (pause detection means 16) that will start an internal timer... (English MAT; page 5, paragraph 17).

As the reference meets all material limitations of the claims at hand, the reference is anticipatory.

Joint Inventors – Common Ownership Presumed

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Wellcome (United Kingdom Patent Application No. GB2163574A).

Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for one or more input selectors have an image or symbol associated therewith for identifying the function and/or operation corresponding thereto.

However, a controller for a user interface having one or more input selectors having an image or symbol for identifying the function and/or operation of a pressing iron is known in the art. Wellcome, for example, teaches a display panel (6) comprising multiple input selection buttons (7), each button corresponding to a particular temperature of the iron (1) as well as fabric types suitable for each temperature and

Art Unit: 3742

conventional dot markings used on conventional iron temperatures controls (page 1, lines 77-92). The advantage of such a configuration provides the user indication marks that coincide with fabric types/temperatures, thereby allowing the user to readily and easily set a temperature according to fabric types. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the input selector of Nakao et al. with a plurality of input selectors and an image/symbol associated to the input selector in order to provide the user indication marks that coincide with fabric types/temperatures, thereby allowing the user to readily and easily set a temperature according to fabric types.

With respect to the limitations of claim 4 and at least one or more input selectors being an LCD panel, Nakao et al. disclose the one or more input selectors (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11) being at the lower portion of the liquid crystal display (13) panel (see Drawing 1), thereby being part of the LCD panel or an LCD panel. In view of Wellcome, providing multiple input selectors with images associated therewith would only increase the length of the user interface and therefore would still be at the lower portion of the liquid crystal display (13) panel (see Drawing 1), thereby being part of the LCD panel or an LCD panel. Therefore, the Nakao et al. and the Nakao in view of Wellcome structures fully meet "at least one or more input selectors being an LCD panel" given its broadest reasonable interpretation.

10. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Wellcome (United

Art Unit: 3742

Kingdom Patent Application No. GB2163574A) as applied to claims 2-4, 6 and 7 above, and further in view of Upadhye et al. (U.S. Publication No. 2003/0074903)

The Nakao-Wellcome combination discloses all of the limitations, as previously set forth, except for the input selectors and output indicators being an LED panel.

However, Upadhye et al. teach that input user interface touchscreen LCD panel or LED panel for a portable heating device being equivalent structures known in the art. Upadhye et al. teach an input device (exemplary input device 76 shown as a keypad may also include a touchscreen) comprising input selectors (touchscreen) being displayed in an LCD or LED display (display indicator 78) depending on the temperature selection (page 3, paragraph 40; see Figure 9). Furthermore, the touchscreen input device (76) being on a LCD or LED display panel structure fully meets an "input selector being an LCD or LED panel" given its broadest reasonable interpretation. Therefore, because these two input selector display panel devices were art recognized equivalents at the time of the invention was made, one of ordinary skill in the art would have found it obvious to utilize an input touchscreen selector on an LCD or LED panel, depending on system requirements, to provide a lower power consumption device and a higher resolution in the device allowing for a smaller but comfortable display, thereby providing a quality product interaction experience.

11. Claims 18-20 and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Barnes et al. (U.S. Patent No. 6,255,630).

Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for the digital interface of the controller having a scrolling LCD display suitable for displaying scrolling text.

However, controllers for heating devices comprising a scrolling text LCD display is known in the art, Barnes et al., for example, teach a controller comprising a control panel (28) that has a central LCD display (column 2, lines 47-54). Barnes et al. teach a display common zone (125) that is utilized to display numerous messages in the form of an array of words or phrases and phrases (column 4, lines 32-36; column 4, line 56 – column 5, line 5; column 6, lines 42-46; column 7, lines 6-11, 27-36; column 8, claim 8; column 9, claim 13; column 10, claim 24). Barnes et al. teach that advantage of such a configuration provides information based on ease of use of and convenience, thereby decreasing the operating complexity of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was to modify Nakao et al. with a scrolling text LCD display in order to provide information based on ease of use of and convenience, thereby decreasing the operating complexity of the device.

With respect to the limitations of claims 82-84 and the digital interface/input selectors being a touch sensitive panel, Nakao et al. explicitly discloses a digital interface having a segmented LCD display (i.e. numeral characters of temperature; see Drawing 2). Nakao et al. further disclose an input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11). The examiner notes that a digital interface is the electronic handshaking that occurs between various components within a device (i.e. microcontroller and components). Nakao et al. clearly disclose a touch

Art Unit: 3742

sensitive panel/user interface having inputs being controlled by microprocessor (10), which displays the input selections in a digital display (liquid crystal display 13). The interface is inherently digital and the input selector (setup key 29/ switch 11 combination) is further a touch-sensitive panel of the device would not operate when the setup key (29) is touched. Therefore, the Nakao et al. in view of Barnes et al. structure fully meets "and the digital interface selectors being a touch sensitive panel" and "at least one of said one or more input selectors is a touch-sensitive panel" given its broadest reasonable interpretation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Ralis whose telephone number is 571-272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen J Ralis
Examiner
Art Unit 3742

SJR
July 10, 2007



TU BA HOANG
SUPERVISORY PATENT EXAMINER